

REMARKS

Claims 1, 2, 5-7 and 9-12 are now pending in the application. Claims 1, 5, and 12 are amended. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 112

Claims 1, 2, 5-7, and 9-12 stand rejected under 35 U.S.C. § 112, first paragraph. This rejection is respectfully traversed.

The Examiner indicates that Applicant's recitation of receiving input text as small as two sentences is not supported in the specification. As amended, the claims no longer contain the objectionable language indicated by the Examiner.

In order to provide clarity with respect to the amended claims, Applicants maintain that the partitioning of large blocks of input text can result in context spaces that contain less than three phrases or sentences. For example, the semantic analysis discussed at paragraph [0014] of the originally filed specification occurs with respect to the entire context space so that a speaking style can be selected for that context space by identification of a topic for that context space. Applicants also wish to ensure that the Examiner does not construe the statement in paragraph [0014] that semantic analysis can occur at a level more granular than three phrases or three sentences as occurring after partitioning into context spaces of at least three phrases or sentences. In particular, it is the partitioning that determines the level of granularity, as only one topic is determined for each context space. For example, it would do no good to determine multiple topics and select multiple styles for a context space, since that would confuse the issue as how to render the input text of the context space into speech. In other

words, since only one speaking style is chosen for a context space, it is the partitioning that determines the level of granularity, so the context spaces can contain less than three sentences or phrases. In still other words, if semantic analysis is performed in separate sections of a context space, then those separate sections are separate context spaces by definition, and therefore can contain less than three phrases or sentences. Moreover, three phrases can exist in less than three sentences. In conclusion, at least three phrases or sentences per context space is the preferred embodiment so that speaking style of the output speech will not change too rapidly, and so that topics can be determined with reliability, but one or more of the context spaces can contain a lesser number of phrases or sentences (i.e., the level of granularity can be higher) in some embodiments.

Accordingly, Applicant's respectfully request the Examiner reconsider and withdraw the rejection of claims 1, 2, 5-7 and 9-12 under 35 U.S.C. § 112, first paragraph.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 5-7, 9, 10, and 12 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Addison et al. (U.S. Pat. No. 6,865,533). This rejection is respectfully traversed.

The teachings of Addison et al. are generally directed toward text to speech. In particular, the Examiner relies on Addison et al. to teach selecting a speaker style by context (i.e., existence of a question mark), by speaker traits (i.e., male versus female, fast speaker versus slow), and by language level (i.e., high school dropout versus college graduate). However, Addison et al. do not teach selecting a speaking style

based on a topic identified for the text. Moreover, Addison et al. do not teach partitioning a block of input text into context spaces of multiple phrases, performing semantic analysis on the context spaces, and selecting a speaking style for each context space.

Applicants' claimed invention is directed toward customizing speaking style of a voice synthesizer based on a topic identified for the text using semantic analysis. In particular, Applicants' claimed invention is directed toward partitioning a block of input text into context spaces of multiple phrases, performing semantic analysis on the context spaces, and selecting a speaking style for each context space. For example, independent claim 1, especially as amended, recites, "receiving a block of input text into a text-to-speech synthesizing system; partitioning the block of input text into a plurality of context spaces each containing multiple phrases; performing semantic analysis on each context space in order to identify a topic for each context space; selecting a speaking style for a each context space from a plurality of predefined speaking styles based on the topics identified respective of the context spaces." Claims 5, and 12, especially as amended, recite similar subject matter. Support for the amendments can be found in the originally filed specification at paragraph [0014]. Therefore, Addison does not teach all of the limitations of the independent claims.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejections of claims 1, 5, and 12 under 35 U.S.C. § 102(e), along with rejection on these grounds of all claims dependent therefrom.

REJECTION UNDER 35 U.S.C. § 103

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Addison et al. (U.S. Pat. No. 6,865,533) in view of Apte et al. (U.S. Pat. No. 6,253,169). This rejection is respectfully traversed.

For discussion of the differences between Applicants' claimed invention and the teachings of Addison et al., Applicants respectfully direct the Examiner's attention to remarks detailed above with respect to the independent claims.

The teachings of Apte et al. are generally directed toward text categorization. In particular, the Examiner relies on Apte et al. to teach identifying a topic of text using keyword spotting. However, Addison et al. and Apte et al. do teach, suggest, or motivate selecting a speaking style based on a topic identified for the text. Moreover, Addison et al. and Apte et al. do not teach partitioning a block of input text into context spaces of multiple phrases, performing semantic analysis on the context spaces, and selecting a speaking style for each context space. These differences are significant.

Accordingly, Applicant's respectfully request the Examiner reconsider and withdraw the rejection of claim 2 under 35 U.S.C. § 103(a) in view of its dependence from an allowable base claim.

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Addison et al. (U.S. Pat. No. 6,865,533) in view of Sutton et al. (U.S. Pat. No. 6,539,354). This rejection is respectfully traversed.

For discussion of the differences between Applicants' claimed invention and the teachings of Addison et al., Applicants respectfully direct the Examiner's attention to remarks detailed above with respect to the independent claims.

The teachings of Sutton et al. are generally directed toward synthetic visual speech. In particular, the Examiner relies on Sutton et al. to teach modifying an expression of a visually displayed talking head based on natural coarticulation. However, Addison et al. and Sutton et al. do teach, suggest, or motivate selecting a speaking style based on a topic identified for the text, or modifying an expression of a visually displayed talking head based on speaking style selected by determined topic of input text. Moreover, Addison et al. and Sutton et al. do not teach partitioning a block of input text into context spaces of multiple phrases, performing semantic analysis on the context spaces, and selecting a speaking style for each context space. These differences are significant.

Accordingly, Applicant's respectfully request the Examiner reconsider and withdraw the rejection of claim 11 under 35 U.S.C. § 103(a) in view of its dependence from an allowable base claim.


CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By: _____


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